# LaCie d2 Big Disk Extreme+ Hard Drive

USB 2.0 • FireWire 400 • FireWire 800

Design by Neil Poulton

user manual | manuel utilisateur | guída utente | handbuch | 用户手册

manual de instrucciones | gebruikershandleiding | ユーザー マニュアル | 용자 설명서

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## Changes

The material in this document is for information only and subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, LaCie assumes no liability resulting from errors or omissions in this document, or from the use of the information contained herein. LaCie reserves the right to make changes or revisions in the product design or the product manual without reservation and without obligation to notify any person of such revisions and changes.

## Canada Compliance Statement

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

## FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

1. The devices may not cause harmful interference
2. The devices must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications to this product not authorized by LaCie could void the FCC & Industry Canada regulations and negate your authority to operate the product.

**CAUTION:** Modifications not authorized by the manufacturer may void the user's authority to operate this device.

## Manufacturer's Declaration for CE Certification

We, LaCie, solemnly declare that this product conforms to the following European standards: Class B EN60950, EN55022, EN55024

With reference to the following conditions: 73/23/EEC Low Voltage Directive; 89/336/EEC EMC Directive

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designed collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service, or the shop where you purchased the product.

**CAUTION:** The LaCie Big Disk Extreme+'s warranty may be void as a result of the failure to respect the precautions listed above.

# Health and Safety Precautions

- Only qualified persons are authorized to carry out maintenance on this device.
- Read this User Manual carefully and follow the correct procedure when setting up the device.
- Do not open your LaCie Big Disk Extreme+ or attempt to disassemble or modify it. Never insert any metallic object into the drive to avoid any risk of electrical shock, fire, short-circuiting or dangerous emissions. Your LaCie Big Disk Extreme+ contains no user-serviceable parts. If it appears to be malfunctioning, have it inspected by a qualified LaCie Technical Support representative.
- Never expose your device to rain, or use it near water, or in damp or wet conditions. Never place objects containing liquids on the LaCie Big Disk Extreme+, as they may spill into its openings. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.
- Make sure that the computer and LaCie Big Disk Extreme+ are electrically grounded. If the devices are not grounded, there is an increased risk of electrical shock. Power requirements 100-240 V~, 1.5 A, 60-50 Hz, (Supply voltage fluctuations not exceeding ± 10% of the nominal, transient over-voltages according to over-voltage category II).

## General Use Precautions

- Do not expose the LaCie Big Disk Extreme+ to temperatures outside the range of 5° C to 35° C (41° F to 95° F) in a configuration with one drive (for multi-drive configurations, please see page 6); or to operational humidity beyond 5-80%, non-condensing, or non-operating humidity beyond 10-90%, non-condensing. Doing so may damage the LaCie Big Disk Extreme+ or disfigure its casing. Avoid placing your LaCie Big Disk Extreme+ near a source of heat or exposing it to sunlight (even through a window). Inversely, placing your LaCie Big Disk Extreme+ in an environment that is too cold or humid may damage the unit.
- Always unplug the LaCie Big Disk Extreme+ from the electrical outlet if there is a risk of lightning or if it will be unused for an extended period of time. Otherwise, there is an increased risk of electrical shock, short-circuiting or fire.
- Use only the power supply shipped with the device.
- Do not use the LaCie Big Disk Extreme+ near other electrical appliances such as televisions or radios. Doing so may cause interference which will adversely affect the operation of the other products.

- Do not place the LaCie Big Disk Extreme+ near sources of magnetic interference, such as computer displays, televisions or speakers. Magnetic interference can affect the operation and stability of your LaCie Big Disk Extreme+.
- Do not place heavy objects on top of the LaCie Big Disk Extreme+ or use excessive force on it.
- Never use excessive force on your LaCie Big Disk Extreme+. If you detect a problem, see the Troubleshooting section in this manual.

**CAUTION:** A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.

**IMPORTANT INFO:** 1GB = 1,000,000,000 bytes. 1TB = 1,000,000,000,000 bytes. Once formatted, the actual available storage capacity varies depending on operating environment (typically 5-10% less).

**IMPORTANT INFO:** Any loss, corruption or destruction of data while using a LaCie drive is the sole responsibility of the user, and under no circumstances will LaCie be held liable for the recovery or restoration of this data. To help prevent the loss of your data, LaCie highly recommends that you keep **TWO** copies of your data; one copy on your external hard drive, for instance, and a second copy either on your internal hard drive, another external hard drive or some other form of removable storage media. LaCie offers a complete line of CD and DVD drives. If you would like more information on backup, please refer to our website.

# 1. Introduction to the LaCie Big Disk Extreme+

Thank you for purchasing the new LaCie Big Disk Extreme+. Combining compatibility with high throughput rates and mammoth storage capacity, the Big Disk Extreme+ is ideally suited for audio/video pros working with large amounts of DV and SD video or professional level 2D/3D imaging projects, or high speed data backup.

Engineered to fit seamlessly into most work environments, the LaCie Big Disk Extreme+ can be stood vertically on the LaCie Drive Stand (included), placed in the LaCie Desk Rack (sold separately) or incorporated into standard 19" computer equipment racks with the LaCie Rackmount Kit (sold separately).

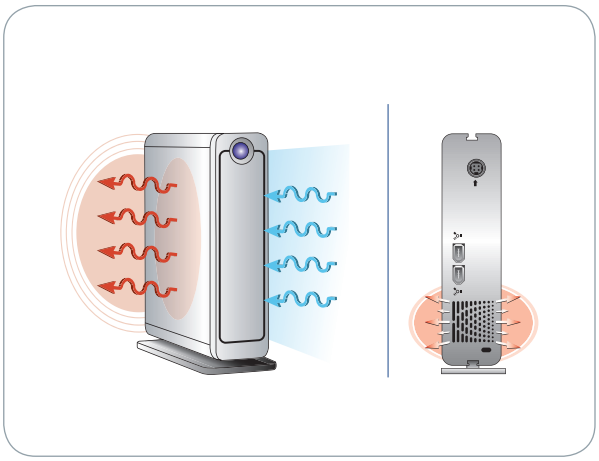
## Your Big Disk Extreme+ Hard Drive Capabilities

- Hi-Speed USB 2.0, FireWire 400, FireWire 800 interfaces
- Daisy-chain digital video cameras directly to the drive
- Connects to all of the FireWire and USB standard interfaces
- Back up your computer's internal hard drive
- Store and exchange data between several computers

## 1.1. Hard Drive Heat Management

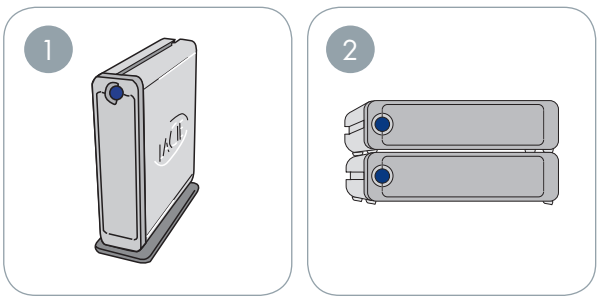
### Heat Dissipation Design

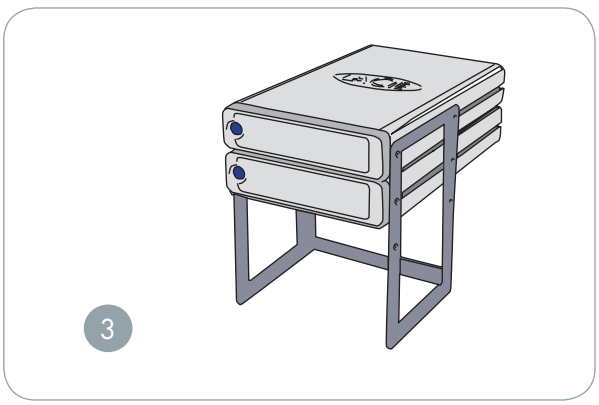
The LaCie Big Disk Extreme+'s metal body is ideal for naturally dissipating internal drive heat. Its unique design actually draws heat away from the internal drive toward the external casing. The casing absorbs heat and will take advantage of its large surface to further dissipate heat outside the casing. Because of this advantageous feature, heat is taken away from the internal drive, keeping it safe and prolonging its life and reliability. As a consequence, it is normal that the external casing is hot to the touch. Please make sure that the vents of the back-bezel and front-bezel are not obstructed so that there is a natural airflow across the casing.



### Upright, Stack & Rackmount Configuration

Heat dissipation is maximized when the drive is in the upright position (1). If you have several LaCie drives stacked on each other, please remember to attach the included rubber feet on the under side of your drives (2). This will allow for some airflow between your drives so that the heat dissipation can work effectively - especially if your LaCie drive does not include a fan. LaCie does not recommend stacking or racking more than 2 Big Disk Extreme+, Big Disk USB or Big Disk Extreme with Triple Interface drives on top of each other (3), especially if these drives are turned ON simultaneously. When stacking two drives (or three), environment temperature should not exceed 30°C.




### Smart Fan Technology

The casing alone is a great way to dissipate heat without the need of a fan. Therefore, currently, most drives do not require a fan. Only the largest capacity drives may need a fan. To find out if your drive includes a fan, please refer to the item number and product datasheet.

Some models of the Big Disk Extreme+ have a thermo-regulated "smart fan", which activates when the heat inside the casing reaches a certain temperature. The smart fan adjusts automatically to changes in temperature.

# 2. Your LaCie Big Disk Extreme+

## 2.1. Minimum System Requirements

### Windows Users

- FireWire 800, FireWire 400 or USB 2.0 port
- Windows 2000, Windows XP or Windows Vista
- 500MHz processor or higher
- Minimum 128MB RAM (512MB recommended)

### Mac Users

- FireWire 800, FireWire 400 or USB 2.0 port
- Mac OS 10.2.8 or later
- G4, G5, Intel 500MHz processor or higher
- Minimum 128MB RAM (512MB recommended)

**IMPORTANT INFO:** The LaCie Big Disk Extreme+ is compatible with the Intel Core processors.

## 2.2. Box Content

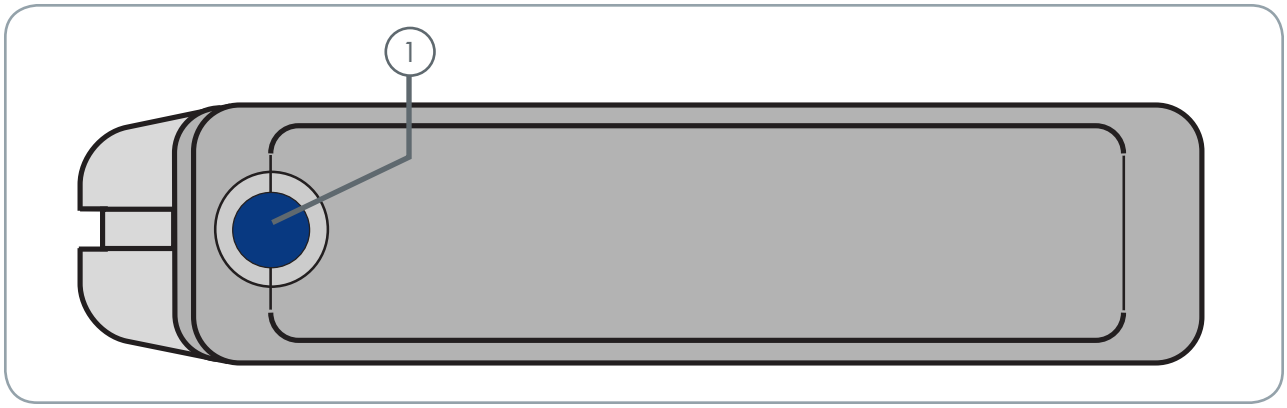
Your LaCie Big Disk Extreme+ box should contain the following:

1. LaCie Big Disk Extreme+
2. Vertical stand kit
3. Power supply kit
4. Hi-Speed USB 2.0 cable
5. FireWire 400 6-to-6-pin cable
6. FireWire 800 9-to-9-pin cable
7. LaCie Storage Utilities CD-ROM (includes User Manual)
8. LaCie Shortcut Button CD-ROM
9. Quick Install Guide

**IMPORTANT INFO:** Please save your packaging. In the event that the drive should need to be repaired or serviced, it must be returned in its original packaging.

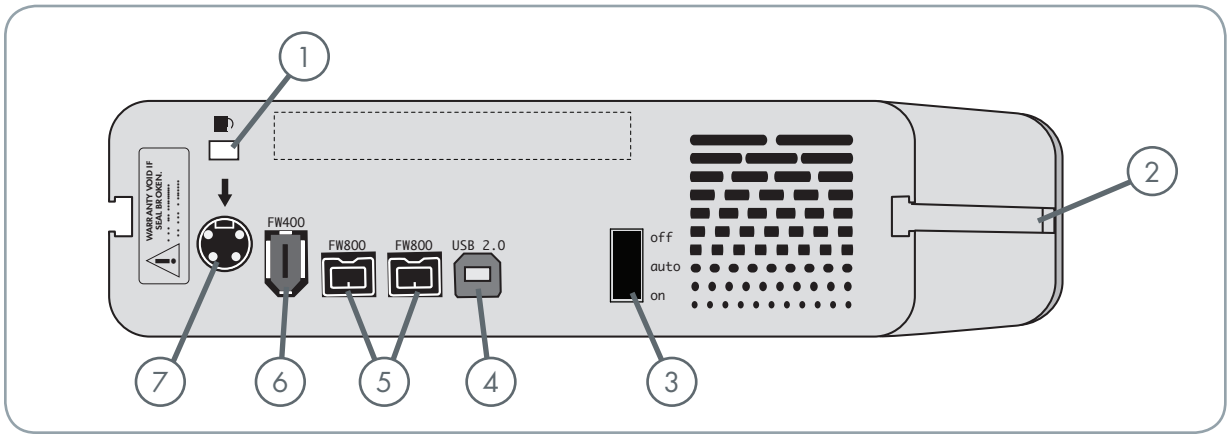
## 2.3. Views Of The Drive

### Front View




1 **Shortcut Button with Activity LED**
Push the Shortcut Button to launch the document or application of your choice (see section 3.6, LaCie Shortcut Button for more information).
The LED remains lit to show that the drive is on, and blinks to indicate drive activity.

## Rear View




1. **Lock Slot -** This slot is used to connect an anti-theft chain lock, such as a Kensington security lock*, for maximum protection.

2. **Rackmount Grooves -** These grooves are used for attaching your drive to the Drive Stand, mounting in the Desk Rack kit (sold separately) or placing your drive in standard 19" computer equipment racks using the LaCie Rackmount Kit (sold separately).

3. **On/Off/Auto Power Switch -** The auto position allows the drive to be powered on and off automatically with your computer. This feature also allows the drive to manage power consumption. If the system's power fan supports it, the LaCie Big Disk Extreme+ will spin down while in power save mode. The Big Disk Extreme+ will then take several seconds to spin up to full power.

4. **Hi-Speed USB 2.0 Port -** This is where you plug in the Hi-Speed USB 2.0 cable furnished with the drive. See page 15, Connecting the Interface Cable for more information.

5. **FireWire 800 Ports -** This is where you plug in the FireWire 800 cable furnished with the drive. See page 17, Connecting the Interface Cable for more information.

6. **FireWire 400 Port -** This is where you plug in the FireWire 400 cable furnished with the drive. See page 16, Connecting the Interface Cable for more information.

7. **Power Supply Connection -** This is where you plug in the AC adapter supplied with the drive. See page 14, Connecting The Power Supply for more information.

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## 2.4. Cables and Connectors

### FireWire 400 & FireWire 800

FireWire 400, also known as IEEE 1394, is a high-speed serial input/output technology for connecting peripheral devices to a computer or to each other, and FireWire 800 is the implementation of the new IEEE 1394b standard.

FireWire 800 offers increased bandwidth and extended distance between devices. FireWire 800 is ideal for bandwidth-intensive applications, such as audio, video and graphics. Please see page 33, FireWire Questions And Answers for more information on FireWire.

#### FireWire Icons

Theses icons will help you easily identify the FireWire interface. They appear on FireWire cables, and next to the FireWire port connectors on certain computers.

| FireWire icon | iLink icon | DV icon |
|---|---|---|

#### FireWire Cables

There are two categories of FireWire cables on the market: FireWire 800 cables, which feature the 9-to-9-pin, 9-to-6-pin, and 9-to-4-pin cables; and the original FireWire cables which feature the 6-to-6-pin and 6-to-4-pin cables.

For more information on the differences between the Big Disk Extreme+'s interfaces, see chapter 4.2. Interface Comparison.

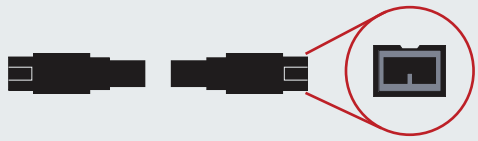
#### FireWire 800 Benefits

- Resourceful architecture: FireWire 800 reduces delays in arbitration and signal distortion, and increases throughput.
- Backwards compatibility: adapter cables allow FireWire 400 devices to operate under the FireWire 800 port (at FireWire 400 speed).

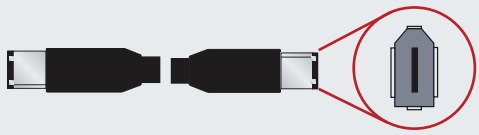
#### FireWire 400 & FireWire 800 Benefits

- Hot-pluggable: devices can be added and removed while the bus is active.
- Isochronous data delivery: no dropped frames – FireWire supports real-time data delivery.
- Flexible: up to 63 devices can be connected on a single bus.

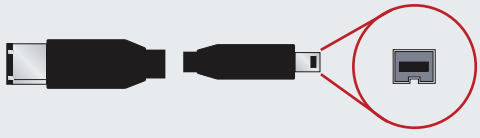
#### FireWire 800 Cable and Cable End



#### FireWire 400 Cable and Cable End



#### iLink/DV Cable and Cable End (Sold separately)



## Hi-Speed USB 2.0

USB is a serial input/output technology for connecting peripheral devices to a computer or to each other. Hi-Speed USB 2.0 is the latest implementation of this standard, and it provides the necessary bandwidth and data transfer rates to support high speed devices such as hard drives, CD/DVD drives and digital cameras.

Please see page 35, USB Questions And Answers for more information on USB's uses and capabilities.

### USB Icons

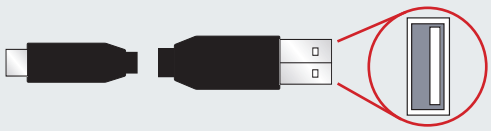
These icons will help you easily identify the USB interfaces. They appear on USB cables and next to the USB port connectors on certain computers.

| | |
|---|---|
| USB 2.0 icon | USB 1.1 icon |

### USB 2.0 Cables

Your LaCie drive is shipped with a Hi-Speed USB 2.0 cable, to ensure maximum data transfer performance when connected to a Hi-Speed USB 2.0 port. The cable will also work when connected to a USB port, but drive performance will be limited to USB 1.1 transfer rates.

**USB 2.0 Cable and Cable End**



For more information on the differences between the Big Disk Extreme+'s interfaces, see chapter 4.2. Interface Comparison.

### Hi-Speed USB 2.0 Benefits

- Backwards compatibility: Hi-Speed USB 2.0 works with the original USB specifications.
- Hot-swappable: no need to shut down or restart your computer when adding or removing devices.

# 3. Installing Your LaCie Big Disk Extreme+

There are two parts to connecting and turning on your LaCie Big Disk Extreme+: 1) connect the power supply to the drive and to an outlet, and 2) connecting an interface cable to the drive and to your computer. In about five minutes, you should be able to access your new hard drive to back up data and to transfer files between computers and other peripherals.

Thanks to its support of four different interfaces and its support of both the Mac and Windows operating system, the LaCie Big Disk Extreme+ gives you many connectivity options. These steps are divided into sections by operating system (Mac or Windows) and the type of interface cable (FireWire 800, FireWire 400, and Hi-Speed USB 2.0).

This chapter also has helpful information about connecting digital video cameras to the LaCie drive, connecting multiple devices and special steps that need to be followed when disconnecting the drive or switching between the different interfaces.

**IMPORTANT INFO:** You cannot have the FireWire and USB interfaces connected at the same time. If you would like to switch between interfaces, you must follow the steps on page 19, Switching Interfaces.

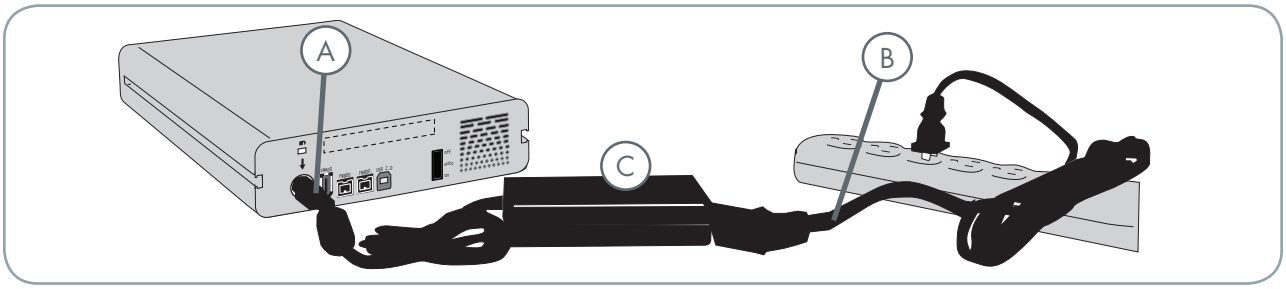
**TECHNICAL NOTE:** If you plan to use your drive in a cross-platform (Mac/Windows) environment, consider reformatting the drive to the MS-DOS (also known as FAT 32) File System format. See page 28 for more details.


| | | |
|---|---|---|
| Step 1 | Connecting the Power Supply | Page 14 |
| Step 2 | Connecting the USB Cable | Page 15 |
| | Connecting the FireWire 400 Cable | Page 16 |
| | Connecting the FireWire 800 Cable | Page 17 |
| | Connecting Multiple Devices | Page 18 |


**CAUTION:** Your LaCie Big Disk Extreme+ relies on its aluminum alloy casing to help dissipate heat. Make sure to place your drive in a well ventilated space, do not block the ventilation outlet on the back of the drive and keep the area in front of the drive unobstructed to allow for proper airflow.

## 3.1. Connecting the Power Supply

The power supply kit is composed of two cables: one cable (A) connects to the LaCie drive; and the other cable (B) connects to a power outlet, such as a wall outlet or a surge protector.




1. Connect Cable **A** to your LaCie Drive.
2. Connect Cable **B** to the Power supply brick (**C**).
3. Connect Cable **B** to a surge protector or wall outlet.
4. On the back of the drive, turn on the drive by flipping the power switch to ON or AUTO (drive powers on/hibernates automatically).

**CAUTION:**

- Only use the AC adapter supplied with your specific LaCie drive. Do not use a power supply from another LaCie drive or another manufacturer. Using any other power cable or power supply may cause damage to the device and void your warranty.
- Always remove the AC adapter before transporting your LaCie drive. Failure to remove the adapter may result in damage to your drive and will void your warranty.

**TECHNICAL NOTE:**

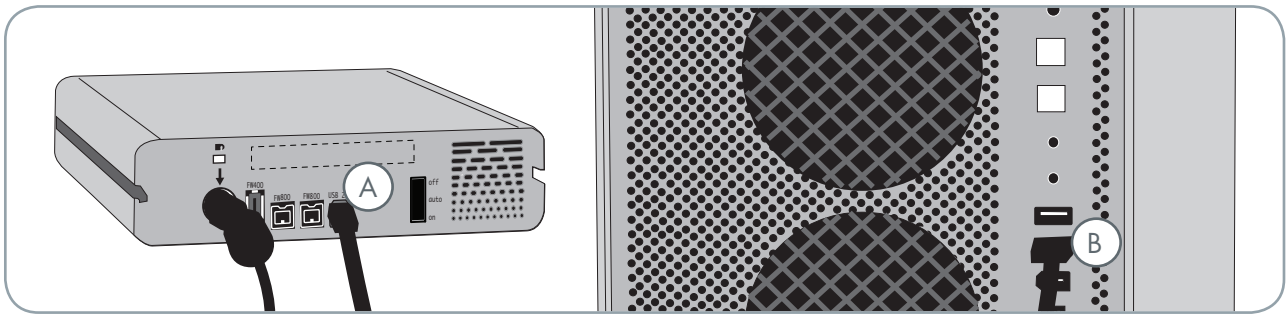
**On/Off/Auto Power Switch:**

- The **AUTO** position allows the drive to be powered on and off automatically with your computer (works with USB and FireWire connection only). If the system's power fan supports it, the LaCie Big Disk Extreme+ will spin down while in the power save mode. The Big Disk Extreme+ will then take several seconds to spin up to full power. Use this position when energy efficiency and quiet drive operation are priorities.
- The **ON** position is ideal for network configurations and allows quick access to your data.
- The **OFF** position isolates your hard drive from incorrect operation, protecting your data when your Big Disk Extreme+ is not in use.

## 3.2.a. Connecting the USB Cable

1. Connect the Power supply cable (page 14) and turn on the LaCie Big Disk Extreme+ by flipping the power switch to ON or AUTO (drive powers on/hibernates automatically).
2. Connect the Hi-Speed USB 2.0 cable into the Hi-Speed USB 2.0 port on the back of the LaCie Big Disk Extreme+ (A).
3. Attach the other end of the interface cable to an available USB port on your computer (B).

**TECHNICAL NOTE:** To achieve Hi-Speed USB 2.0 transfer rates, you have to be connected to a Hi-Speed USB 2.0 port on your computer. Otherwise, you will be limited to USB 1.1 data transfer rates.




**4 .Windows Users:**
You must format the drive before it will mount in your My Computer folder. See page 29, Formatting and Partitioning Your LaCie Big Disk Extreme+, for more details.

**Mac Users:**
The drive is pre-formatted for Mac use and should appear on your desktop.

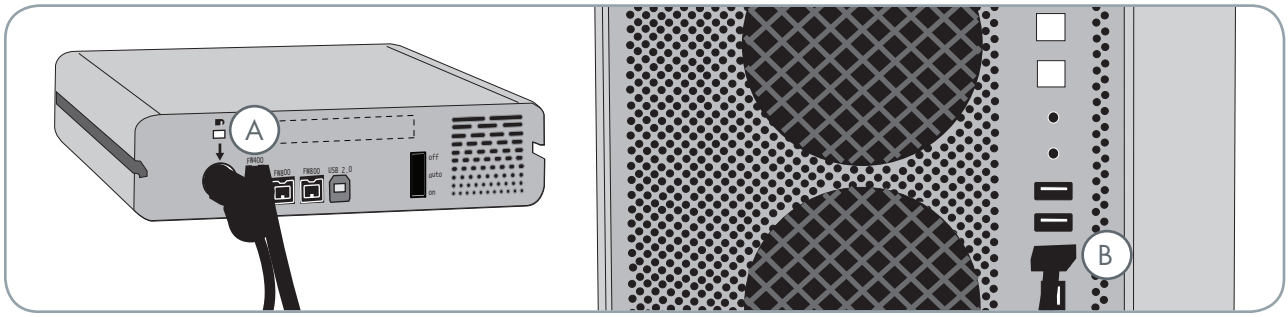
**TECHNICAL NOTE:** For more information on USB connections, see the following pages:

- Page 11, Cables and Connectors
- Page 35, USB Questions & Answers

## 3.2.b. Connecting the FireWire 400 Cable

1. Connect the power supply cable (page 14) and turn on the LaCie Big Disk Extreme+ by flipping the power switch to ON or AUTO (drive powers on/hibernates automatically).
2. Connect the FireWire 400 cable into the FireWire 400 port on the back of the LaCie Big Disk Extreme+ (A).
3. Attach the other end of the interface cable to an available FireWire 400 port on your computer (B).

**TECHNICAL NOTE:** For information on daisy-chaining using the FireWire interface, see page 18, Connecting Multiple Devices.




**4 .Windows Users:**
You must format the drive before it will mount in your My Computer folder. See page 29, Formatting and Partitioning Your LaCie Big Disk Extreme+, for more details.

**Mac Users:**
The drive is pre-formatted for Mac use and should appear on your desktop.

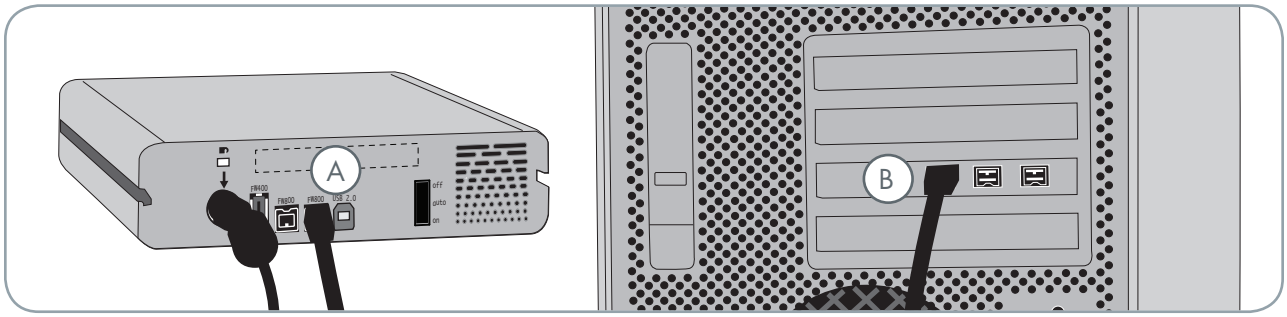
**TECHNICAL NOTE:** For more information on FireWire connections, see the following pages:

- Page 11, Cables and Connectors
- Page 33, FireWire Questions & Answers

## 3.2.c. Connecting the FireWire 800 Cable

1. Connect the power supply cable (page 14) and turn on the LaCie Big Disk Extreme+ by flipping the power switch to ON or AUTO (drive powers on/hibernates automatically).
2. Connect the FireWire 800 cable into the FireWire 800 port on the back of the LaCie Big Disk Extreme+ (A).
3. Attach the other end of the interface cable to an available FireWire 800 port on your computer (B).

**TECHNICAL NOTE:** For information on daisy-chaining using the FireWire interface, see page 18, Connecting Multiple Devices.




**4 .Windows Users:**
You must format the drive before it will mount in your My Computer folder. See page 29, Formatting and Partitioning Your LaCie Big Disk Extreme+, for more details.

**Mac Users:**
The drive is pre-formatted for Mac use and should appear on your desktop.

**TECHNICAL NOTE:** For more information on FireWire connections, see the following pages:

- Page 12, Cables and Connectors
- Page 35, FireWire Questions & Answers

## 3.3. Connecting Multiple Devices

With both FireWire 400 and FireWire 800 interfaces, it is possible to connect another hard drive or digital video camera directly to the LaCie Big Disk Extreme+ (this connection is called "daisy-chaining").

To daisy-chain devices, you must be using the same interface (FireWire). Your computer will not recognize the daisy-chained device if the interfaces are mixed, i.e. a FireWire device attached to a drive that is connected to the computer via the Hi-Speed USB 2.0 interface.

1. Connect your LaCie Big Disk Extreme+'s power supply and host computer interface by following the steps on page 14 and on 16 (FireWire 400) or 17 (FireWire 800) (A/B).
2. **To attach a digital video camera*:**
   a. Using the iLink/DV cable (sold separately), connect the 4-pin end of the cable to the 4-pin port on your digital camera.
   b. Connect the 6-pin end of the iLink/DV cable to the 6-pin FireWire port on the back of the LaCie Hard drive (C).

   **To attach a FireWire peripheral:**
   a. Connect the FireWire 400 or 800 cable into an available FireWire 400 or 800 port on your FireWire peripheral.
   b. Attach the other end of the FireWire 400 or 800 cable to an available FireWire 400 or 800 port on the LaCie Big Disk Extreme+ (C).
3. The digital camera should now appear under My Computer (Windows users) or on the desktop (Mac users).

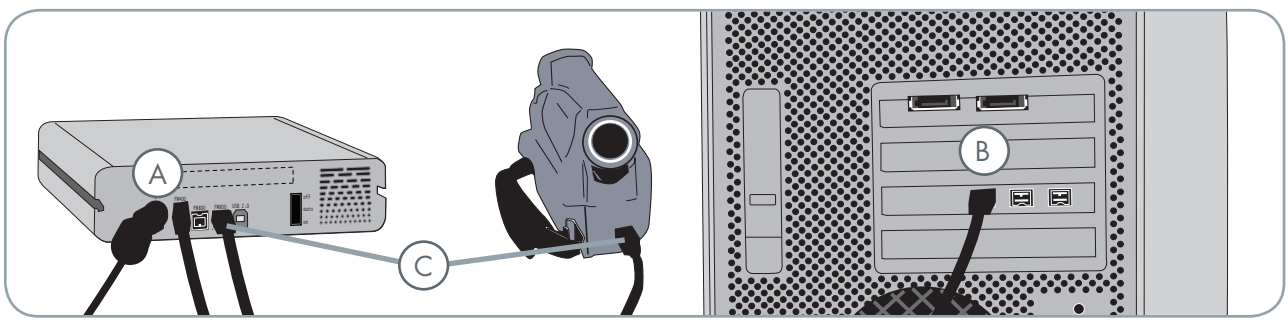
**IMPORTANT INFO:** You can not have the FireWire and USB interfaces connected at the same time. If you would like to switch between interfaces, you must follow the steps on page 19, Switching Interfaces.

### Daisy-Chain Configurations

- FireWire 400 device connected directly to the LaCie Big Disk Extreme+, which is connected to the computer via the FireWire 800 port.
- iLink/DV device connected directly to the LaCie Big Disk Extreme+, which is connected to the computer via the FireWire 800 port.
- FireWire 800 device connected directly to the LaCie Big Disk Extreme+, which is connected to the computer via the FireWire 800 port.

**TECHNICAL NOTE:** When you daisy-chain using a mix of interfaces (FireWire 400 and FireWire 800) the resultant speed will be limited to the lowest common denominator (FireWire 400 speeds).

* Some cameras do not support this configuration or may downgrade your LaCie Big Disk Extreme+'s performance



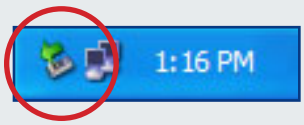
## 3.4. Disconnecting Your LaCie Big Disk Extreme+

FireWire and USB external devices feature "plug & play" connectivity, which means that your drive can be connected and disconnected while the computer is running. To prevent failures, however, it is important you follow these steps when disconnecting your LaCie Big Disk Extreme+.

**TECHNICAL NOTE: Windows Vista Users:** Your operating system may be configured to allow FireWire devices to be disconnected without following this procedure. LaCie recommends that you disable this feature. See section 7, Troubleshooting or the Windows Vista user manual for more information.

### Windows Users

1. From the **System Tray** (located in the lower right-hand side of your screen), click the **Eject** icon (a small green arrow over a hardware image).
2. A message will appear, detailing the devices that the Eject icon controls, i.e. "Safely remove...". Click on this prompt.
3. You will be then given this message: "Safe to Remove Hardware" (or similar). It is now safe to disconnect the device.




### Mac Users

1. Drag the hard drive icon to the trash.
2. When the icon disappears from the desktop, the drive can be disconnected.

## 3.5. Switching Interfaces

FireWire and USB external devices feature "plug & play" connectivity, which means that your drive can be connected and disconnected while the computer is running. To prevent failures, however, it is important to unmount your drive before switching interfaces. See chapter 3.4. Disconnecting Your LaCie Big Disk Extreme+, for the unmounting procedure.

## 3.6. LaCie Shortcut Button

The LaCie Shortcut Button allows you to use your LaCie hard drive to perform a variety of automated tasks on your computer. Instantly back up your work files with EMC® Retrospect® Express, open a family budget spreadsheet, or launch your most commonly-used applications simply by pushing the blue button on the front of your drive.

LaCie Shortcut Button will help you to customize the Button to perform the action of your choice. Setup is easy – just install the software and push the Button on your LaCie hard drive to set up the button action.

**IMPORTANT INFO:** For instructions on using EMC Retrospect Express, please see the EMC Retrospect Express user manual, installed with the application.

### 3.6.1. Software Installation

**To install LaCie Shortcut Button and EMC Retrospect Express:**

1. Insert the installation CD into your computer's CD-ROM drive.
2. Double-click the CD icon.
3. Follow the on-screen instructions.

**TECHNICAL NOTE:** EMC Retrospect Express and LaCie Shorcut Button must be uninstalled separately. Uninstalling EMC Retrospect Express does not uninstall LaCie Shortcut Button.

Mac Users

- EMC Retrospect Express is installed in the Applications folder.
- LaCie Shortcut Button appears in System Preferences (see section 3.6.3, Changing Button Settings).

Windows Users

- EMC Retrospect Express is installed in C:/Program Files.
- LaCie Shortcut Button appears in the Control Panel (see section 3.6.3, Changing Button Settings).

## 3.6.2. Setup

You can set up the Button to automatically back up data from your computer to your LaCie hard drive or to perform a custom action.

1. Make sure your LaCie hard drive is connected to your computer and turned on and then push the button on the front of the drive. The LaCie Shortcut Button Welcome screen appears. Click **OK**.
2. The LaCie Shortcut Button main window opens. See Fig. 3.6.2.A (Mac) and 3.6.2.B (Windows).

**IMPORTANT INFO:** Pushing the button launches setup only once. After setup, pushing the button will launch the action you specify in setup.

### Mac Interface

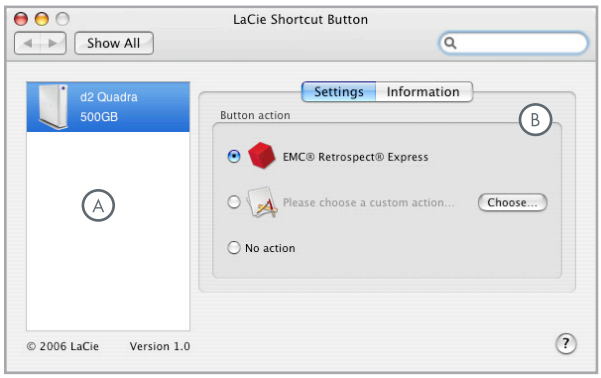



Fig. 3.6.2.A

### Windows Interface

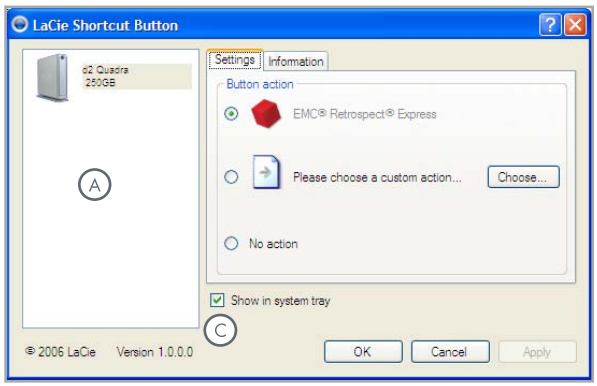



Fig. 3.6.2.B

(A) **Drive List** – Displays all compatible LaCie drives currently connected to your computer.

(B) **Settings and Information** – Displays and modifies LaCie Shortcut Button preferences for the selected drive. Also displays drive information.

(C) **Show in system tray** – Check this box to display the LaCie Shortcut Button icon in the system tray (Windows only).

## Set up EMC Retrospect Express

3. Select the drive you want to modify from the drive list.
4. "EMC Retrospect Express" is selected by default. Click **OK**. See **A** in Fig. 3.6.2.C and 3.6.2.D.
5. EMC Retrospect Express launches. Use EMC Retrospect Express to make settings for the backup you want to perform each time you push the LaCie Button.

After you have configured EMC Retrospect Express, each time you push the Button, EMC Retrospect Express will automatically perform the backup operation specified in setup. To change the backup operation, launch EMC Retrospect Express and change settings.

## Set up a Custom Action

3. Select the drive you want to modify from the drive list.
4. To use a custom action, click the "Please choose a custom action..." radio button. See **B** in Fig. 3.6.2.C and 3.6.2.D.
5. Click the **Choose...** button and navigate to the application, document or script you want to launch with the Button. Click **Open**.
6. A new icon and name are displayed for the selected application, document or script. Click **Apply**. Click **OK**.

## Disable the Button

3. Select the drive you want to modify from the drive list.
4. To disable the Button for this drive, select "No action." See **C** in Fig. 3.6.2.C amd 3.6.2. D.

Windows users, if the system tray icon is activated, the alert in Fig. 3.6.2.E will appear when the button is pushed.

**IMPORTANT INFO:** Please consult the EMC Retrospect Express user manual for informations on creating and modifying backups.

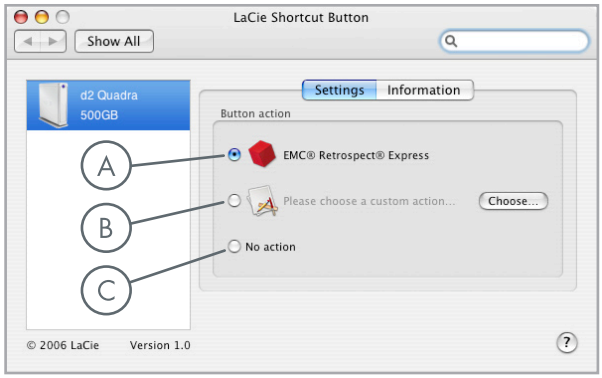



Fig. 3.6.2.C

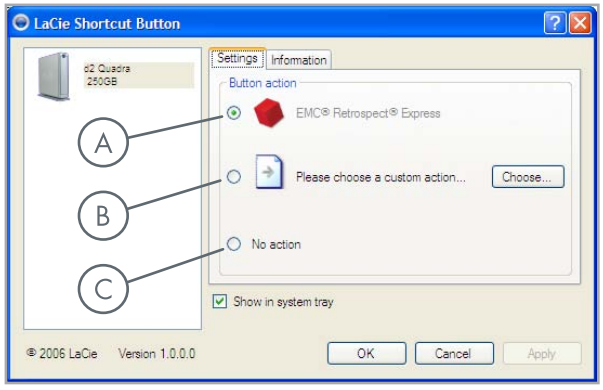



Fig. 3.6.2.D

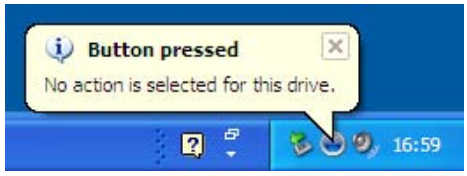



Fig. 3.6.2.E

## 3.6.3. Changing Button Settings

### Mac Users

To change the action assigned to a Button, open LaCie Shortcut Button by clicking on the LaCie Shortcut Button icon in System Preferences (**Apple Menu > System Preferences…**). See Fig. 3.6.3.A.

Select the Settings tab and follow the instructions in section 3.6.2 beginning with step 3 of the type of action you want to activate.

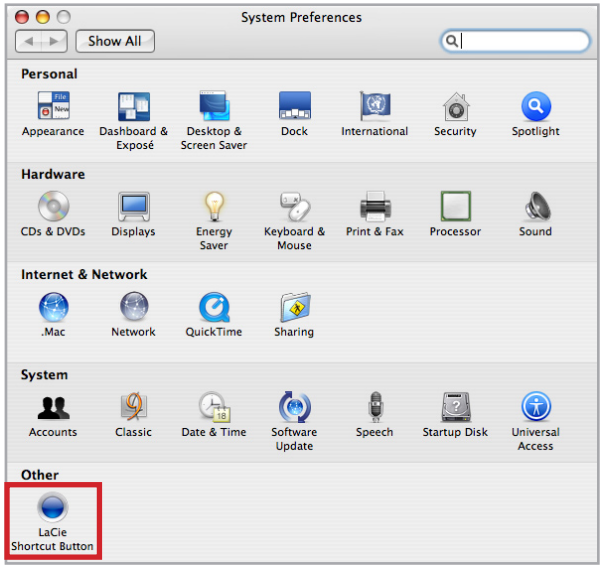



Fig. 3.6.3.A

### Windows Users

To change the action assigned to a Button, open LaCie Shortcut Button by clicking on the LaCie Shortcut Button icon in the Control Panel (**Start > Settings > Control Panel**). See Fig. 3.6.3.B.

Select the Settings tab and follow the instructions in section 3.6.2 beginning with step 3 of the type of action you want to activate.

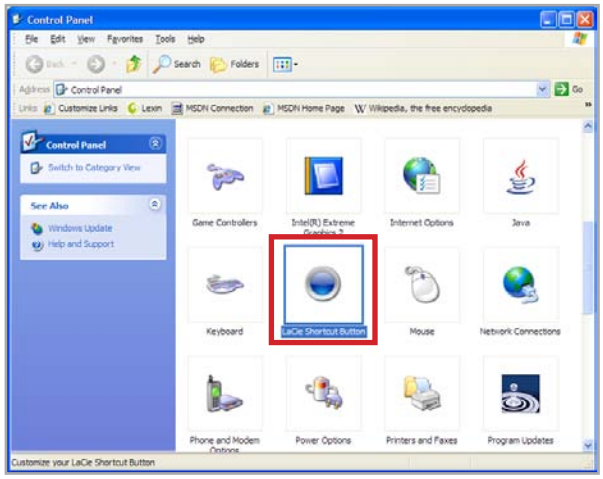



Fig. 3.6.3.B

### 3.6.4. Drive Detection

At launch, LaCie Shortcut Button will search for LaCie Shortcut Button-compatible drives and display them in the drive list. See **A** in Fig. 3.6.4.A (Mac) and 3.6.4.B (Windows).

If no drives can be detected on the USB or FireWire bus, the list will display "No drives connected." See **B** in Fig. 3.6.4.A (Mac) and 3.6.4.B (Windows). Check your drive's connections and make sure it is turned on. If the problem persists, see section 4, Troubleshooting.

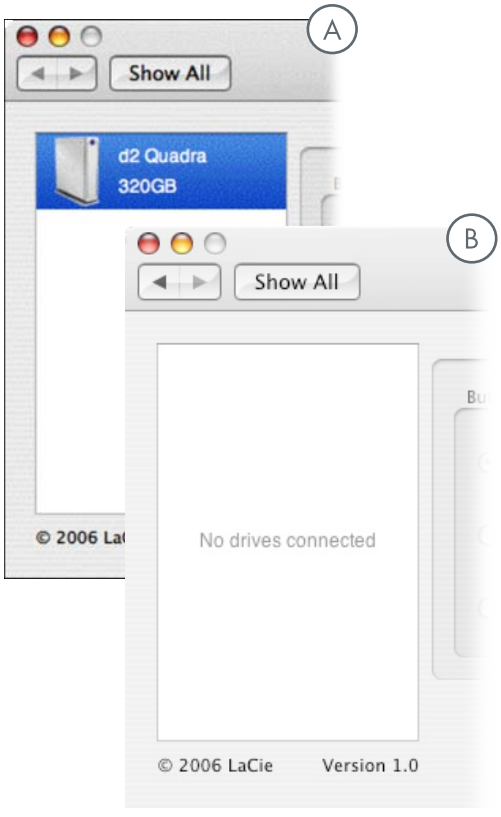



Fig. 3.6.4.A

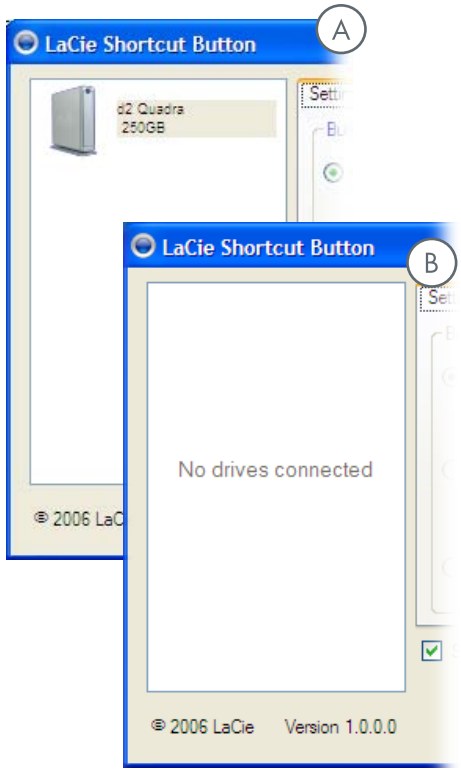



Fig. 3.6.4.B

## Windows Connection Alerts

**Windows Users Only:**

The LaCie Shortcut Button icon in the system tray displays a connection message when a button-enabled LaCie drive is connected or disconnected from the computer. See Fig. 3.6.4.C.

To remove the LaCie Shortcut Button icon from the system tray, uncheck the "Show in system tray" check box on the LaCie Shortcut Button main window. See Fig. 3.6.4.D.

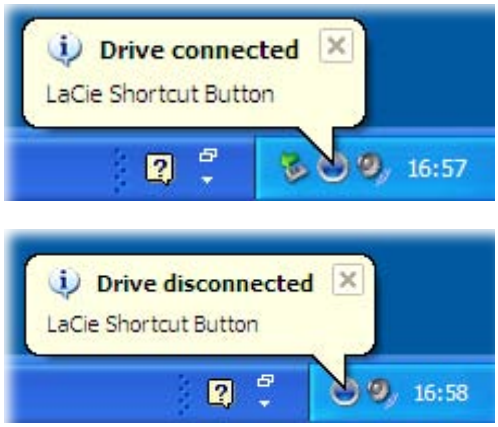



Fig. 3.6.4.C

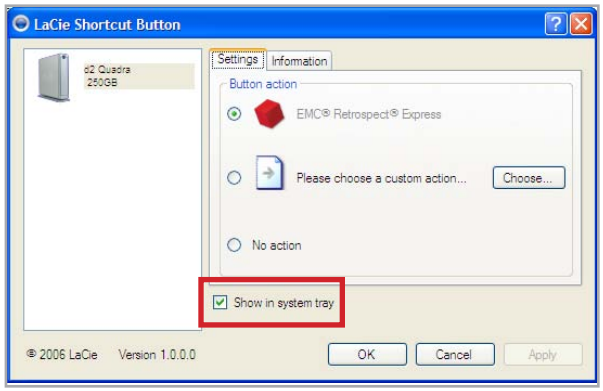



Fig. 3.6.4.D

## 3.6.5. Information

The Information tab of LaCie Shortcut Button displays basic details of the drive selected in the drive list. Items on the Information tab are not editable. See Fig. 3.6.5.A (Mac) and 3.6.5.B (Windows).

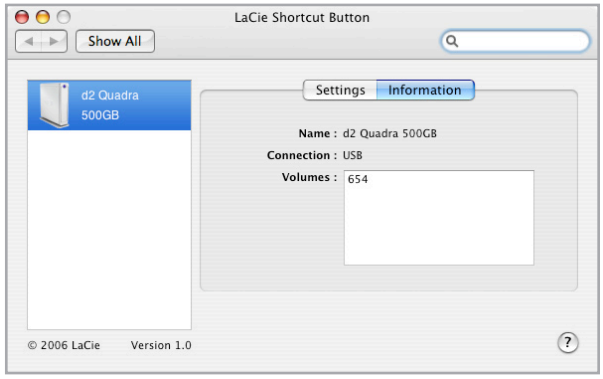



Fig. 3.6.5.A

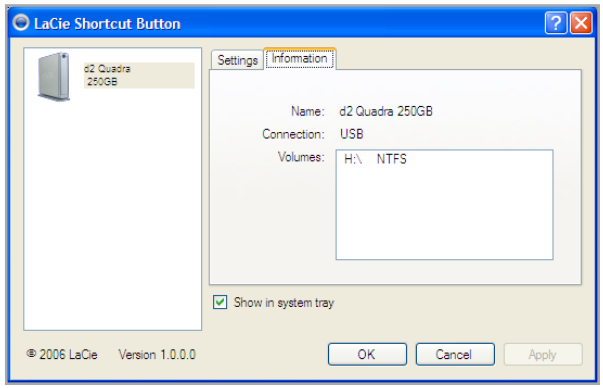



Fig. 3.6.5.B

## 3.6.6. Updates

The software version number of the LaCie Shortcut Button is displayed below the drive list. To search for new updates, go to **www.lacie.com/support**.

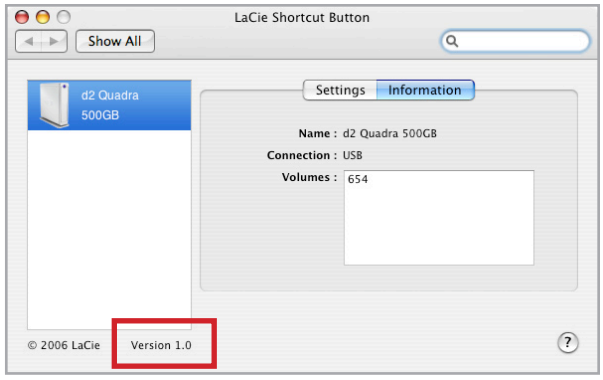



Fig. 3.6.6

### 3.6.7. Troubleshooting – Mac

| Problem | Solution |
|---|---|
| Drive is connected, but "No drives connected" message appears in the drive list. | Check both ends of the FireWire or USB cable to make sure they are fully seated in their respective ports. Try disconnecting the cables, waiting 10 seconds, and then reconnecting them. If the drive is still not recognized, restart your computer and try again. |
| Nothing happens when the button is pushed. | Make sure the drive is connected to your computer. See above. |
| | Launch LaCie Shortcut Button from System Preferences.<br>❖ Make sure the drive appears in the drive list.<br>❖ Make sure that the "No action" button is off. If it is on, select the EMC Retrospect Express action or a custom action. |
| "The action ["action name"] can't be launched" error message when the button is pushed. | If the application, document or script you defined as the custom action has been moved from its location at the time you defined the action, LaCie Shortcut Button will not be able to locate or launch it. Either redefine the action by clicking **Choose...** to select the application, document or script in its new location or return it to its original location. |

### 3.6.8. Troubleshooting – Windows

| Problem | Solution |
|---|---|
| Drive is connected, but "No drives connected" message appears in the drive list. | Check both ends of the FireWire or USB cable to make sure they are fully seated in their respective ports. Try disconnecting the cables, waiting 10 seconds, and then reconnecting them. If the drive is still not recognized, restart your computer and try again. |
| Nothing happens when the button is pushed. | Make sure the drive is connected to your computer. See above. |
| | Launch the LaCie Shortcut Button by double-clicking on the LaCie Shortcut Button system tray icon or from **Control Panel > LaCie Shortcut Button**.<br>❖ Make sure the drive appears in the drive list.<br>❖ Make sure that the "No action" button is off. If it is on, select the EMC Retrospect Express action or a custom action. |
| "File not found. Renew custom action selection." error message when the button is pushed. | If the application, document or script you defined as the custom action has been moved from its location at the time you defined the action, LaCie Shortcut Button will not be able to locate or launch it. Redefine the action by clicking **Choose...** to select the application, document or script in its new location. |

# 4. Helpful Information

Your LaCie Big Disk Extreme+ is formatted in HFS+. This is the most efficient format for use with your Mac. If you would like to share this hard drive with PC users, you will have to reformat your LaCie Big Disk Extreme+.

## What is Formatting?

Formatting a disk consists of the following: the operating system erases all of the bookkeeping information on the disk, tests the disk to make sure that all of the sectors are reliable, marks bad sectors (i.e., those that are scratched) and creates internal address tables that it later uses to locate information.

## File System Formats

There are essentially three different file system formats: NTFS, FAT 32, and Mac OS Extended (HFS+). See the following chart for more information.

## Partitioning Your LaCie Big Disk Extreme+

After you've formatted the drive, you will have the opportunity to divide the hard drive into sections, called partitions. A partition is a section of the hard drive's storage capacity that is created to contain files and data. For instance, you could create three partitions on your drive: one partition for your Office documents, one for your backup, and one for your multimedia files.v

**TECHNICAL NOTE: FAT 32** is recommended for sharing a hard drive with Windows 2000, Windows XP and Windows Vista and Mac OS users. However keep in mind that the FAT 32 format will slow down your hard drive and single file size is limited to 4 GB.

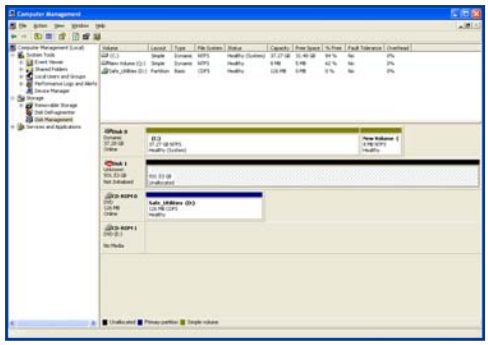
| Use NTFS if... | Use HFS+ if... |
|---|---|
| ...you will be using the drive only under Windows 2000 or Windows XP (performance will generally be greater when compared to FAT 32). This file system is compatible in read only mode with Mac OS 10.3 and higher. | ...you will be using the drive on Macs only; performance will generally be greater when compared to FAT 32. This file system is NOT compatible with Windows OS. |
| **Use FAT 32 if...** | For more information, please refer to page 29, Formatting And Partitioning Your LaCie Hard Drive. |
| ...you will be using your drive between both Windows and Mac 10.x; or sharing the drive between Windows 2000, Windows XP, and Windows Vista. Maximum single file size: 4GB. | |

## 4.1. Formatting and Partitioning

Once you have setup your LaCie Big Disk Extreme+, you can reformat it to suit your needs.

### ■ Windows Users

Windows 2000, Windows XP and Windows Vista – Use the Disk Management Utility, which is native to the operating system.

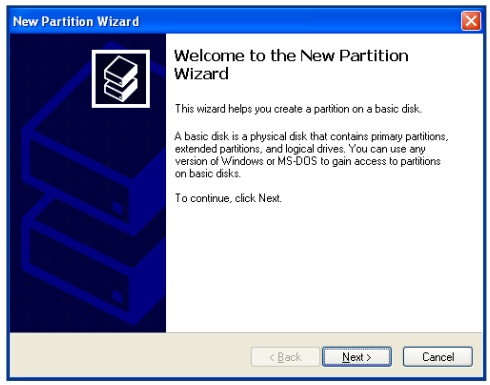


Disk management utility

#### Formatting Using Windows 2000, Windows XP and Windows Vista

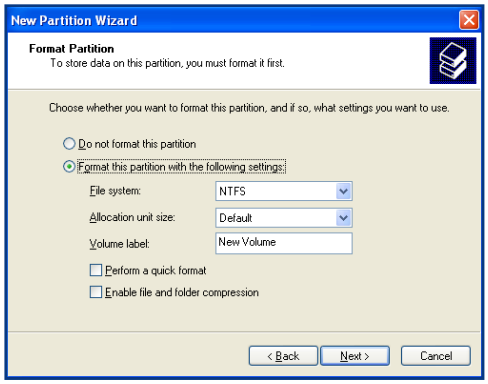
The process of formatting a drive on a computer running Windows 2000, Windows XP or Windows Vista consists of two steps: (1) installing a signature on the drive, and (2) formatting the drive. These steps will erase anything that is on the disk.

1. Connect the drive to the computer via the interface port.
2. Right click **My Computer** and click **Manage**.
3. From the **Computer Management** window, select **Disk Management** (located below the **Storage** group).
4. If the **Initialize and Convert Disk Wizard** window appears, click **Cancel**.
5. Windows will list the hard drives that are installed on the system. Locate the drive that is represented by the icon. Right click the icon and select **Initialize**.
6. In the box to the right that says **Unallocated**, right click and select **New Partition...**
7. In the first page of the New Partition Wizard, click **Next.**


New Partition Wizard
Welcome to the New Partition Wizard
This wizard helps you create a partition on a basic disk.
A basic disk is a physical disk that contains primary partitions, extended partitions, and logical drives. You can use any version of Windows or MS-DOS to gain access to partitions on basic disks.
To continue, click Next.
< Back
Next >
Cancel

Disk management utility

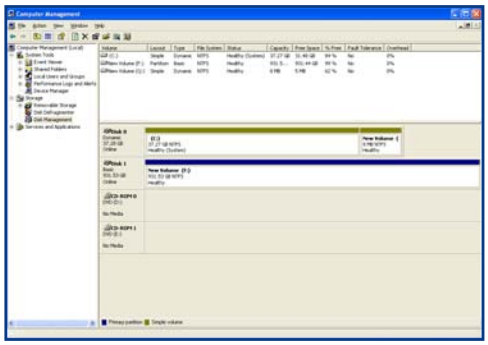
8. Click **Next**.
9. Click **Next**.
10. Click **Next**.
11. Click **Next**.
12. In this window, you have the option of selecting the Quick Format option. This allows a much faster format; however, this will disallow Disk Management to check the drive for errors (recommended). Click **Next**.


New Partition Wizard
Format Partition
To store data on this partition, you must format it first.
Choose whether you want to format this partition, and if so, what settings you want to use.
Do not format this partition
Format this partition with the following settings:
File system:
NTFS
Allocation unit size:
Default
Volume label:
New Volume
Perform a quick format
Enable file and folder compression
< Back
Next >
Cancel

Disk management utility

13. Click **Finish** to begin the format process.
14. Your drive is ready for use and should now appear in your **My Computer**.

**IMPORTANT INFO:** Please refer to page 28, Helpful Information, for a more detailed comparison of the various file system formats.



Disk management utility
(drive ready for use)

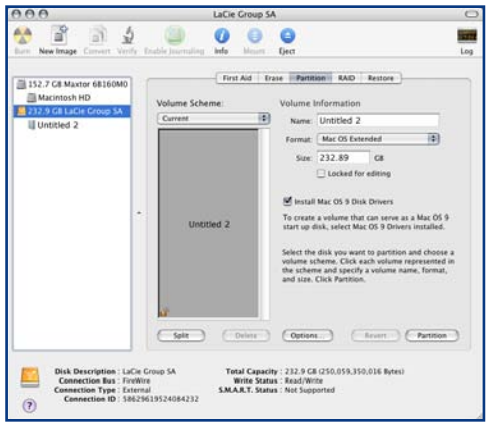
## Mac Users

Mac OS 10.x will use the Apple Disk Utility application, which is native to the operating system.

### Formatting Using Mac OS 10.x

1. Connect the drive to the computer via one of its interfaces and turn on the drive by pressing the blue button.
2. Go to the **Menu Bar**, and open **Go**.
3. From the Go menu, click on **Applications**.
4. In the Applications menu, open the **Utilities** folder, and then double-click **Disk Utility** from the Utilities folder.
5. The Disk Utility window will open. In the left side of the window will be a list of the available hard disk drives. You should see a volume that represents your internal hard drive, and one labeled **LaCie Hard Drive**.
6. From the **Volume Scheme:** button, choose the number of partitions you want to divide the drive into by clicking on the pull down menu starting with **Current** (Mac OS 10.x gives you the option of dividing the drive into at most 8 partitions). You can customize the size of the partitions by using the slide bar between the partitions in the **Volume Scheme:** area.
7. In the **Volume Information** section, create a name for each partition, choose the volume format (Mac OS Extended, Mac OS Standard or UNIX File System) and the volume size.
8. Once you have finalized the volume format, number of partitions, size and options, click **OK**. The following message will appear: **Warning! Saving the new volume will erase all existing volumes. This can NOT be undone. Are you sure you want to do that?** Click **Partition** to continue.
9. Mac OS 10.x will automatically setup the disk with the partitions and volume format you selected, and your new drive will be available for use.

**IMPORTANT INFO:** Following these steps will erase anything that is on the hard drive. Therefore, if you have information that you want to protect or continue to use, back-up this information before performing these steps.




Disk management utility (Mac)

**IMPORTANT INFO:** Please refer to page 28, Helpful Information, for a more detailed comparison of the various file system formats.

**IMPORTANT INFO:** Apple recommends that unless you have a specific reason to use the UNIX File System (UFS), you should use the Mac OS Extended format since it provides a more familiar experience to Macintosh users.

## 4.2. Interface Comparisons

Deciding which interface to use, whether it be Hi-Speed USB 2.0, FireWire 400 or FireWire 800 can be a complicated decision. Depending on the interfaces your computer has, your decision should be based on the following:

### Computer With only USB 1.1 Ports

If your computer is only equipped with a USB port, your decision is fairly simple: connect via the USB cable provided with your drive. Hi-Speed USB 2.0 is backward compatible and can be used in USB 1.1 ports. Again, you will be limited to USB 1.1 speeds and performance.

### Computer With Hi-Speed USB 2.0 and FireWire 400 Ports

If your computer is equipped with a Hi-Speed USB 2.0 port and a FireWire port, you will get noticeably better performance by using the FireWire connection. Compared to Hi-Speed USB 2.0, FireWire has higher sustained data transfer rates, a feature especially important for audio and video editors. Also, Hi-Speed USB 2.0 will not allow you to daisy-chain multiple hard drives to your computer.

### Computer With Hi-Speed USB 2.0, FireWire 400 And FireWire 800 Ports

If your computer is equipped with these three interfaces, you have several options to consider. The key decision in this equation is, again, speed. FireWire 800 effectively offers twice the bandwidth of both Hi-Speed USB 2.0 and FireWire 400. So, if you are running bandwidth-intensive applications, such as digital audio, video or graphics, FireWire 800 is your clear choice.

Another alternative is to purchase a FireWire 400, FireWire 800 or Hi-Speed USB 2.0 host adapter card that you would install into a PCI, PCI-X or PCI-Express slot on your computer, thereby allowing your computer to take advantage of the performances that these interfaces have to offer. Contact your LaCie reseller or LaCie Customer Support for information about PCI, PC, PCI-X or PCI-Express Cards, or visit our website: **www.lacie.com**.

# 5. FireWire Questions & Answers

## What Does IEEE 1394 Mean?

IEEE (the Institute of Electrical and Electronics Engineers) refers to the engineering corps that developed the 1394th standard, defining the high-performance serial input/output (I/O) bus used to connect peripheral devices. There are now two standards:

IEEE 1394a, which refers to the original standard adopted in 1995, and IEEE 1394b, which refers to the new standard, adopted in 2002.

## What Is The Relationship Between IEEE 1394, FireWire, iLink And DV?

These four names all refer to the same interface:

- IEEE 1394 is the term commonly used in the computer industry.
- FireWire is the brand name used by Apple.
- iLink is the brand name used by Sony for both consumer electronics and personal computers.
- DV is short for "Digital Video," and is used as the logo for the interface on most video camcorders.

## What Are The FireWire Interface Benefits?

The FireWire interface is a fast, cross-platform serial bus, and is ideal for digital audio, video and graphic applications that demand plenty of bandwidth. Both versions of FireWire offer Plug & Play connectivity, so all you have to do is plug in your drive and you're ready to go. They also allow up to 63 devices to be connected via a single bus and offer peer-to-peer connectivity, enabling multiple computers and FireWire devices to be connected at the same time. FireWire also supports both isochronous and asynchronous capabilities, meaning that it can guarantee real-time data delivery, so there is no danger of inaccurately ordered or delayed frames.

## What Is The Difference Between FireWire 400 And FireWire 800?

Essentially, the main difference between the two interfaces is speed. FireWire 800 effectively doubles the bandwidth of the original FireWire 400 interface. The new FireWire 800 interface offers truly impressive results, with speeds up to 800Mb/s for a single bus, and even greater for several buses in RAID 0 configurations.

Other key advancements include the support of increased cabling distances and a newly enhanced arbitration architecture.

Utilizing cables constructed of professional-grade glass optical fiber, when both devices are connected via a FireWire 800 hub, FireWire 800 can burst data across 100 meters of cable.

The new arbitration scheme greatly improves on the existing architecture by incorporating advanced 8B10B data encoding (based on codes used by Gigabit Ethernet and Fibre Channel), which reduces signal distortion, and also improves the arbitration time by prepping the arbitration while the current data packet is being sent, so that data is sent as soon as the current transmission is completed.

## What Are The Ideal Uses For FireWire?

FireWire helped fuel a revolution for digital content creators, and was awarded a 2001 Primetime Emmy Engineering Award by the Academy of Television Arts & Sciences for its contribution. Due to its high bandwidth and support of both isochronous and asynchronous data delivery, FireWire has found a very successful place in both the computer and consumer electronics industries. Whether connecting game consoles, personal video recorders, home stereo equipment, digital TVs, hard drives, CD/DVD-RW drives, printers, scanners, tape

drives or other digital hardware equipment, FireWire is well suited to handle all these requirements.

For those working with digital video, the new standard will enable new bandwidth-intensive applications, such as multiple-stream, uncompressed, standard-definition video.

## Will FireWire 400 Devices Run Faster When Connected To A FireWire 800 Port?

Unfortunately, this is not the case. In order to attain FireWire 800 speeds, both the device and port have to be FireWire 800 enabled. For instance, an external hard drive with a FireWire 800 9-pin connection will only reach FireWire 800 transfer rates when it is connected to a FireWire 800 9-pin host bus adapter card via a properly certified FireWire 800 9-pin to 9-pin beta cable.

When a FireWire 400 device is connected to a FireWire 800 port, the FireWire 400 device will only operate at the original FireWire 400 speeds.

## Will FireWire 800 Devices Work On FireWire 400 Ports And Vice Versa?

The new standard was designed to be backwards compatible, meaning that FireWire 800 devices will still operate via the original FireWire 400 port. However, to connect a FireWire 800 device to a FireWire 400 port, a specific adapter cable must be used. Two types of FireWire 400 ports exist: 6-pin and 4-pin. For FireWire 800 devices to work, they must be connected by placing the 9-pin end of the FireWire cable into the FireWire 800 port of the device, and the opposite 6-pin or 4-pin end into the FireWire 400 port.

The same holds true for FireWire 400 devices being connected to a FireWire 800 host port. The 4-pin or 6-pin end of the FireWire cable must be connected to the FireWire 400 port of the device, and the 9-pin end must be connected to the FireWire 800 port.

When FireWire 400 and FireWire 800 devices are mixed, all transfer rates revert to the original FireWire 400 speed.

## What Do I Do If My Computer Does Not Have A FireWire Port?

Most computers manufactured today incorporate at least one FireWire port. If your computer does not have a native port, you can install one by adding a PCI or PCMCIA host bus adapter card. Please contact your computer supply specialist for a specific card that will work with your system.

For more information about PCI cards, please visit: **www.lacie.com/addons**

# 6. USB Questions & Answers

## What Are The USB Interface Benefits?

- Cross-platform: Use your USB peripherals on both Mac and Windows platforms.
- "Hot Swappable": No need to shut down or restart your computer when adding or removing a USB device. Plug it in and it's ready to use.
- Automatic configuration: Once your device is connected, your computer recognizes the device and automatically configures the necessary software.
- Daisy-Chaining: with USB ports on your computer, you can connect up to 127 peripherals using hubs.
- Easy Installation: One standardized port and plug combination makes it simple to connect.

## What Is The Difference Between USB And Hi-Speed USB 2.0?

The main difference is speed. The original version of the interface is capable of throughput up to 12Mb/s. Hi-Speed USB 2.0 supports data speeds up to 480 Mb/s, making it 40 times faster than its predecessor. This increased bandwidth translates into higher performance in demanding applications requiring high transfer rates.

## What Are The Ideal Uses For USB?

USB is perfect for more traditional connections such as keyboards, mice, joysticks and scanners. These types of devices don't require fast data transfer rates, and operate very successfully at the slower speeds.

## What Are The Ideal Applications For Hi-Speed USB 2.0?

Digital cameras, CD/DVD drives, hard drives and scanners will all benefit from the added bandwidth and performance gains of the new implementation of the USB standard. Hi-Speed USB 2.0 provides the necessary fast data transfer rates that today's devices require, and combines the earlier specifications so older devices that operated under the original USB standards will still work with Hi-Speed USB 2.0.

## Will USB Devices Run Faster When Connected To A Hi-Speed USB 2.0 Bus?

Unfortunately, no. The Hi-Speed USB 2.0 specification is specifically written to allow developers to design higher speed peripherals that can take advantage of the extra bandwidth. USB devices, though, will still operate at 12Mb/s at full-speed and 1.5Mb/s at low-speed on a Hi-Speed USB 2.0 bus. Even though USB devices won't run any faster, they can work alongside Hi-Speed USB 2.0 devices on the same bus. However, if you plug in a Hi-Speed USB 2.0 device to a USB bus, the speed of the Hi-Speed USB 2.0 device will decrease to 12Mb/s.

## What Is A USB Hub?

Technically, you can connect up to 127 devices to a single USB bus. For more than two devices, though, you must make new connections using a peripheral called a "hub." A hub, which you hook up directly to a USB connector on your computer, usually has 4 or 7 output connections enabling you to connect the same number of peripherals. One of the hub's main functions is to regenerate signals that lose strength as they are transmitted via the USB cable. By connecting yet another hub to a connector on the existing hub, you can then plug in a new set of peripherals etc, up to a maximum of 127.

Some hubs have no power supply and others are self-powered. When you choose a hub, opt for the self-powered variety, as they have their own AC adapter. The most powerful hubs provide 0.5A of power to each

port.

If you buy a hub, make sure that it supports per-port switching. This function prevents the entire chain of peripherals from freezing up if one of them is not working properly or is down.

## Will Hi-Speed USB 2.0 Devices Work On USB Hubs And Vice Versa?

You can use your Hi-Speed USB 2.0 devices with USB hubs, but the peripherals will be limited to USB performance levels.

There are Hi-Speed USB 2.0 hubs that are able to communicate in three modes: high-speed (480Mb/s), full-speed (12Mb/s), and low-speed (1.5Mb/s). Hi-Speed USB 2.0 is backwards compatible, so you will be able to connect USB devices to Hi-Speed USB 2.0 hubs; however, the USB devices will still maintain their normal performance levels (i.e. 12 Mb/s).

In order to achieve the fast data transfer rates of Hi-Speed USB 2.0, you must connect your Hi-Speed USB 2.0 device directly to a Hi-Speed USB 2.0 port on either a computer or hub.

For more information about the USB interface, please visit: **www.lacie.com/technologies**

**TECHNICAL NOTE:**

- Avoid using USB connectors found on certain peripherals such as keyboards. These are passive (or passthrough) connectors that lead to power loss and unstable operation.
- Only use USB cables shorter than 5 meters (approximately 15 feet). Using longer cables may cause the peripherals to malfunction due to excessive reduction in electrical signal strength.

# 7. Troubleshooting

In the event that your LaCie Big Disk Extreme+ is not working correctly, please refer to the following checklist to find out where the problem is coming from. If you have gone through all of the points on the checklist and your drive is still not working correctly, please have a look at the FAQs that are regularly published on our website – **www.lacie.com**.

One of these FAQs may provide an answer to your specific question. You can also visit the drivers pages, where the most recent software updates will be available. If you need further assistance, please contact your LaCie reseller or LaCie Technical Support (see page 42, Contacting Customer Support for details).

### Manual Updates

LaCie is constantly striving to give you the most up-to-date, comprehensive User's Manuals available on the market. It is our goal to provide you with a friendly, easy-to-use format that will help you quickly install and utilize the many functions of your new device.

If your manual does not reflect the configurations of the product that you purchased, please check our website for the most current version available.

## 7.1. Mac Users

| Problem | Question | Answer |
|---|---|---|
| The drive is not recognized by the computer. | Does an icon for the drive appear on the desktop? | There should be an icon for the LaCie drive on the desktop. If the drive does not appear, follow the rest of the Troubleshooting tips to isolate the problem. |
| | Does your computer's configuration meet the minimum system requirements for use with this drive? | Check page 7, Minimum System Requirements for more information. |
| | Is the drive's power supply connected and turned on? | Make sure that the power supply is properly connected (see page 14, Connecting The Power Supply), that the drive has been turned on by pressing the On/Off/Auto button the back of the drive, and that the outlet the power supply is connected to is also turned on. |
| | Did you follow the correct installation steps for the specific interface and operating system. | Review the installation steps on pages 15-18, Connecting The Interface Cable. |
| | Are both ends of the FireWire, eSATA or USB cables firmly attached? | Check both ends of the FireWire or USB cables and make sure that they are fully seated in their respective ports. Try disconnecting the cables, waiting 10 seconds, and then reconnecting them. If the drive is still not recognized, restart your computer and try again. |

| Problem | Question | Answer |
|---|---|---|
| The drive turns on and off when you turn your computer on and off (USB and FireWire connections only). | This is normal. Your drive has an autoswitching power feature, which means that if your drive is connected to your computer, turning the computer on will automatically turn the drive on. Likewise, turning the computer off will automatically turn the drive off. If you wish to power off the drive while it is connected to your computer, first make sure that your computer is not accessing the drive and then follow the steps in page 19, Disconnecting Your LaCie Big Disk Extreme+. After you have disconnected the drive, fkip the On/Off/Auto button on the back of the drive to turn the drive off. | |
| The drive is not recognized by the computer. | Have the USB or FireWire drivers been installed correctly and enabled? | Open **Apple System Profiler** and click on the **Devices and Volumes** tab. If your device is not listed, recheck the cables and try the other troubleshooting tips listed here. |
| | Is there a conflict with other device drivers or extensions? | Contact LaCie Technical Support for help. |
| | Has the drive been formatted? | Make sure that the drive has been formatted properly. Please see pages 29, Formatting And Partitioning Your LaCie Big Disk Extreme+ and 28, Helpful Information for more details. |
| | Does your computer's operating system support the file system? | Check your computer's documentation and see pages 29, Formatting And Partitioning Your LaCie Big Disk Extreme+ and 28, Helpful Information for more information. |
| Error messages under Mac OS 10.x. | Did you get an "Error –50" message while copying to a FAT 32 volume? | When copying files or folders from Mac OS 10.x to a FAT 32 volume, certain characters cannot be copied. These characters include, but are not limited to:<br>? < > / \ :<br>Check your files and folders to ensure that these types of characters are not being used. |
| | Did you get an error message telling you that the drive has been disconnected when coming out of sleep mode? | Simply ignore this message. The drive will remount to the desktop. LaCie drives conserve power by spinning down when you set your computer to sleep mode, and when the computer is "woken" from sleep, it does not give the drive enough time to spin-up from its sleep mode. |
| | Are you having problems getting your FireWire device to be recognized? | If you are having problems with your FireWire connection under Mac OS 10.2.x, upgrade to the latest Mac OS version. |
| The drive is working slowly. | Are there other USB or FireWire devices connected to the same port or hub? | Disconnect any other USB or FireWire devices and see if the drive's performance increases. |
| The drive is not running noticeably faster when connected via Hi-Speed USB 2.0. | Are you operating in Mac OS 9.x? | Apple does not support the Hi-Speed USB 2.0 standard under Mac OS 9.x. You will be limited to the slower transfer rates of the original USB standard. |
| | Are you operating in Mac OS 10.x? | Apple has only recently begun incorporating native Hi-Speed USB 2.0 ports in their computers. To achieve Hi-Speed USB 2.0 transfer rates, you will need to add a Hi-Speed USB 2.0 PCI or PC card to your computer. |

| Problem | Question | Answer |
|---|---|---|
| The drive is not running noticeably faster when connected via Hi-Speed USB 2.0. | Is the drive connected to a USB port on your computer, or to a USB hub? | If your drive is connected to a USB port or hub, this is normal. A Hi-Speed USB 2.0 device can only operate at Hi-Speed USB 2.0 performance levels when it is connected directly to a Hi-Speed USB 2.0 port or hub. Otherwise, the Hi-Speed USB 2.0 device will operate at the slower USB transfer rates. For more information, please see page 35, USB Questions And Answers. |
| | Is the drive connected to a Hi-Speed USB 2.0 port on your computer? | Check to see that the Hi-Speed USB 2.0 drivers for both your host bus adapter and device have been installed correctly. If in doubt, un-install the drivers and re-install them. |
| | Does your computer or operating system support Hi-Speed USB 2.0? | See page 7, Minimum System Requirements. |
| System fan is not running. | Confirm the outlet is powered, verify power connections, and try an alternate power cable. The fan on the LaCie Big Disk Extreme+ does not run continuously; it is activated at certain temperatures. | |
| | Your drive may not have a fan. The LaCie Big Disk Extreme+ comes in different capacities, and only the highest capacities feature a drive fan. | |

## 7.2. Windows Users

| Problem | Question | Answer |
|---|---|---|
| The drive is not recognized by the computer. | Has the drive been formatted? | Make sure that the drive has been formatted properly. Please see pages 29, Formatting And Partitioning Your LaCie Big Disk Extreme+ and 28, Helpful Information for details. |
| | Does your computer's operating system support the file system? | Check your computer's documentation and see pages 29, Formatting And Partitioning Your LaCie Big Disk Extreme+ and 28, Helpful Information for details. |
| | Is there an icon for the drive in **My Computer**? | Go into **My Computer** and look for an icon and drive letter assigned to the LaCie drive. If the drive does not appear, follow the rest of the Troubleshooting tips to isolate the problem. |
| | Does your computer's configuration meet the minimum system requirements for use with this drive? | Check page 7, Minimum System Requirements for more information. |
| | Is the drive's power supply connected and turned on? | Make sure that the power supply is properly connected (see page 14, Connecting The Power Supply), that the drive has been turned on by flipping the On/Off/Auto button on the back of the drive, and that the outlet the power supply is connected to is also turned on. |
| | Did you follow the correct installation steps for the specific interface and operating system. | Review the installation steps on pages 15-18, Connecting The Interface Cable. |

| Problem | Question | Answer |
|---|---|---|
| The drive is not recognized by the computer. | Are both ends of the FireWire or USB cables firmly attached? | Check both ends of the FireWire or USB cables and make sure that they are fully seated in their respective ports. Try disconnecting the cables, waiting 10 seconds, and then reconnecting them. If the drive is still not recognized, restart your computer and try again. |
| | Have the FireWire or USB drivers been installed correctly and enabled? | **Windows 2000 Users:**<br>Go to **Start Menu > Settings > Control Panel > System > Hardware tab > Device Manager button > USB Controller or IEEE 1394 Controller**. Click on the + sign next to the controller icon, and you should see your device listed.<br><br>**Windows XP Users:**<br>Go to **Start Menu > Control Panel > Performance and Maintenance > System > Hardware tab > Device Manager button > USB Controller or IEEE 1394 Controller**. Click on the + sign next to the controller icon, and you should see your device listed.<br><br>If you still can't see your device, recheck the cables and try the other troubleshooting tips listed here. |
| | Is there a conflict with other device drivers or extensions? | Contact LaCie Technical Support for help. |
| The drive turns on and off when you turn your computer on and off. | This is normal. Your drive has an autoswitching power feature, which means that if your drive is connected to your computer, turning the computer on will automatically turn the drive on. Likewise, turning the computer off will automatically turn the drive off. If you wish to power off the drive while it is connected to your computer, first make sure that your computer is not accessing the drive and then follow the steps page 19, Disconnecting Your LaCie Big Disk Extreme+. After you have disconnected the drive, flip the On/Off/Auto button on the back of the drive to turn the drive off. | |
| FireWire 800 does not work under Windows 2000. | Have you installed the Windows 2000 Service Pack 4? | In order to operate FireWire 800 devices under Windows 2000, the Service Pack 4 update must be installed. This is a free download offered on Microsoft's website. |
| The drive is working slowly. | Are there other USB or FireWire devices connected to the same port or hub? | Disconnect any other USB or FireWire devices and see if the drive's performance increases. |
| | Is the drive connected via FireWire to a computer running Windows Vista? | Windows Vista includes a feature that allows you to disconnect your LaCie hard drive from your computer without using the "Safely Remove Hardware" icon in the task bar. This feature works by disabling write caching on the disk, which can reduce the performance of your drive.<br><br>1. Right-click on your LaCie hard drive in **My Computer** and select **Properties**.<br>2. Select the **Policies** tab.<br>3. Select **Optimize for performance**. You should notice an improvement in your drive's performance. Follow the instructions in section 3.4 to disconnect your drive from your computer. |

| Problem | Question | Answer |
|---|---|---|
| The drive is not running noticeably faster when connected via Hi-Speed USB 2.0. | Is the drive connected to a USB port on your computer, or to a USB hub? | If your drive is connected to a USB port or hub, this is normal. A Hi-Speed USB 2.0 device can only operate at Hi-Speed USB 2.0 performance levels when it is connected directly to a Hi-Speed USB 2.0 port or hub. Otherwise, the Hi-Speed USB 2.0 device will operate at the slower USB transfer rates. For more information, please see page 35, USB Questions And Answers. |
| | Is the drive connected to a Hi-Speed USB 2.0 port on your computer? | Check to see that the Hi-Speed USB 2.0 drivers for both your host bus adapter and device have been installed correctly. If in doubt, un-install the drivers and re-install them. |
| | Does your computer or operating system support Hi-Speed USB 2.0? | See page 7, Minimum System Requirements. |
| | Are you using a certified Hi-Speed USB 2.0 cable to connect your drive? | Ensure that the cable you are using has been properly certified. The Hi-Speed USB 2.0 cable that was shipped with your LaCie drive has been properly certified and tested to comply with USB standards. |
| | Are you using Windows 98 SE or Windows Me? | These systems are not supported; USB will not work with either Windows 98 SE or Windows Me. |
| System fan is not running. | Confirm the outlet is powered, verify power connections, and try an alternate power cable. The fan on the LaCie Big Disk Extreme+ does not run continuously; it is activated at certain temperatures. | |
| | Your drive may not have a fan. The LaCie Big Disk Extreme+ comes in different capacities, and only the highest capacities feature a drive fan. | |

# 8. Contacting Customer Support

## Before You Contact Technical Support

1. Read the User Manual and review the Troubleshooting section.
2. Try to isolate the problem. If possible, make the drive the only external device on the CPU, and make sure that all of the cables are correctly and firmly attached.

If you have asked yourself all of the pertinent questions in the troubleshooting checklist, and you still can't get your LaCie drive to work properly, contact us via the contacts on page 43. Before contacting us, make sure that you are in front of your computer and that you have the following information on hand:

- Your LaCie drive's serial number
- Operating system and version
- Computer brand and model
- Amount of memory installed
- Names of any other devices installed on your computer, including CD/DVD burners

## Information to Include in Email Correspondence

| Information | Where to Find Information |
|---|---|
| 1. LaCie Big Disk Extreme+ serial number | Located on a sticker at the back of drive or on the original packaging |
| 2. LaCie Big Disk Extreme+ file format | **Mac users:**<br>Select the Big Disk Extreme+ Hard Drive icon on the desktop and press Command + I, or press the Control key and choose **Get Info**.<br><br>**Windows users:**<br>Right click the Big Disk Extreme+ Hard Drive icon and select **Properties**. |
| 3. Macintosh/PC model | **Mac users:**<br>Click on the Apple icon in the menu bar and select **About this Mac**.<br><br>**Windows users:**<br>Right click **My Computer** and select **Properties > General**. |
| 4. Operating system version | |
| 5. Processor speed | |
| 6. Computer memory | |
| 7. The brands and models of other internal and external peripherals installed on my computer | **Mac users:**<br>Click on the Apple icon in the finder bar and select **About this Mac**. Select **More Info...** The **Apple System Profiler** will launch and will list your internal and external peripherals.<br><br>**Windows users:**<br>Right click **My Computer** and select **Properties > Hardware.** |

## 8.1. LaCie Technical Support Contacts

| | |
|---|---|
| LaCie Asia, Singapore, and Hong Kong<br>Contact us at:<br>http://www.lacie.com/asia/contact/ | LaCie Australia<br>Contact us at:<br>http://www.lacie.com/au/contact/ |
| LaCie Belgium<br>Contact us at:<br>http://www.lacie.com/be/contact/ (Français) | LaCie Canada<br>Contact us at:<br>http://www.lacie.com/caen/contact/ (English) |
| LaCie Denmark<br>Contact us at:<br>http://www.lacie.com/dk/contact | LaCie Finland<br>Contact us at:<br>http://www.lacie.com/fi/contact/ |
| LaCie France<br>Contact us at:<br>http://www.lacie.com/fr/contact/ | LaCie Germany<br>Contact us at:<br>http://www.lacie.com/de/contact/ |
| LaCie Italy<br>Contact us at:<br>http://www.lacie.com/it/contact/ | LaCie Japan<br>Contact us at:<br>http://www.lacie.com/jp/contact/ |
| LaCie Netherlands<br>Contact us at:<br>http://www.lacie.com/nl/contact/ | LaCie Norway<br>Contact us at:<br>http://www.lacie.com/no/contact/ |
| LaCie Spain<br>Contact us at:<br>http://www.lacie.com/es/contact/ | LaCie Sweden<br>Contact us at:<br>http://www.lacie.com/se/contact |
| LaCie Switzerland<br>Contact us at:<br>http://www.lacie.com/chfr/contact/ (Français) | LaCie United Kingdom<br>Contact us at:<br>http://www.lacie.com/uk/contact/ |
| LaCie Ireland<br>Contact us at:<br>http://www.lacie.com/ie/contact/ | LaCie USA<br>Contact us at:<br>http://www.lacie.com/contact/ |
| LaCie International<br>Contact us at:<br>http://www.lacie.com/intl/contact/ | |

# 9. Warranty Information

LaCie warrants your drive against any defect in material and workmanship, under normal use, for the period designated on your warranty certificate. In the event this product is found to be defective within the warranty period, LaCie will, at its option, repair or replace the defective drive. This warranty is void if:

- The drive was operated/stored in abnormal use or maintenance conditions;
- The drive is repaired, modified or altered, unless such repair, modification or alteration is expressly authorized in writing by LaCie;
- The drive was subjected to abuse, neglect, lightning strike, electrical fault, improper packaging or accident;
- The drive was installed improperly;
- The serial number of the drive is defaced or missing;
- The broken part is a replacement part such as a pick-up tray, etc.
- The tamper seal on the drive casing is broken.

LaCie and its suppliers accept no liability for any loss of data during the use of this device, or for any of the problems caused as a result.

LaCie will not, under any circumstances, be liable for direct, special or consequential damages such as, but not limited to, damage or loss of property or equipment, loss of profits or revenues, cost of replacement goods, or expense or inconvenience caused by service interruptions.

Any loss, corruption or destruction of data while using a LaCie drive is the sole responsibility of the user, and under no circumstances will LaCie be held liable for the recovery or restoration of this data.

Under no circumstances will any person be entitled to any sum greater than the purchase price paid for the drive.

To obtain warranty service, call LaCie Technical Support. You will be asked to provide your LaCie product's serial number, and you may be asked to furnish proof of purchase to confirm that the drive is still under warranty.

All drives returned to LaCie must be securely packaged in their original box and shipped with postage prepaid.

**IMPORTANT INFO:** Register online for free technical support: **www.lacie.com/register**

# Glossary

**Asynchronous –** Data transfer method where the data is transferred independently of other processes. With this transfer method, the intervals between transmissions can vary, and data can be resent if it is initially missed.

**Backup –** (1) The act of creating at least one additional copy of data onto a different (and safe) storage device from where it can be retrieved at a later time if needed. (2) A copy of a file, directory, or volume on a separate storage device from the original, for the purposes of retrieval in case the original is erased, damaged, or destroyed.

**Bit –** The smallest measure of computerized data, either a 1 or a 0. Eight bits equal one byte, or one character.

**Block –** A very small section of the storage media comprised of one or more sectors. A block is the smallest amount of space allocated on a drive for data storage. By default, a sector of data consists of 512 bytes.

**Buffer –** RAM cache that is faster than the data that is being delivered. Buffers are used so data may be stored and delivered to the receiving item as it is needed.

**Bus** – Electronic links that enable data to flow between the processor, RAM and extension cables (peripherals).

**Byte –** A sequence of adjacent binary digits, or bits, considered as a unit, 8 bits in length. There are 8 bits in 1 byte. See also MB (Megabyte) or GB (Gigabyte).

**Cache, -ing –** This is an area of electronic storage (usually RAM) set aside to store frequently used data from electromechanical storage (hard drives, floppy disks, CD/DVD-ROM, tape cartridges, etc.) Therefore, storing frequently used data in RAM can enhance your system's overall response to disk-intensive operations significantly.

**Configuration –** When talking about a PC, configuration is understood to be the sum of the internal and external components of the system, including memory, disk drives, the keyboard, the video subsystem and other peripherals, such as the mouse, modem or printer. The configuration also implies software: the operating system and various device managers (drivers), as well as hardware settings and options set by the user via configuration files.

**Controller –** This is a component or an electronic card (referred to in this case as a "controller card," such as PCI or PCMCIA cards) that enables a computer to communicate with or manage certain peripherals. The controller manages the operation of the peripheral associated with it, and links the PC bus to the peripheral via a ribbon cable inside the PC. An external controller is an expansion card which fills one of the free slots inside your PC and which enables a peripheral (CD-ROM drive, scanner or printer, for instance) to be connected to the computer.

**Cross-platform –** Term that refers to a device that is able to be operated by both Mac and Windows operating systems.

**Data Stream –** The flow of data that accomplishes a task, usually related to moving data from storage to computer RAM or between storage devices.

**Digital –** Discrete information that can be broken down to zero or one bits.

**Driver (peripheral manager) –** A software component that enables the computer system to communicate with a peripheral. Most peripherals will not operate correctly – if at all – if the appropriate drivers are not installed on the system.

**File System –** Links the physical map of a disc to its logical structure. Thanks to the file system, users and computers can easily display path, directories and files recorded onto the disc.

**Firmware –** Permanent or semi-permanent instructions

and data programmed directly into the circuitry of a programmable read-only memory or an electronically-erasable, programmable read-only memory chip. Used for controlling the operation of the computer or tape drive. Distinct from the software, which is stored in random access memory and can be altered.

**Folder –** A list created on a disk to store files. Creating folders and sub-folders enables you to organize the storage of your files in a logical, hierarchical manner so that you can find and manage them more easily.

**Format, -ting, -ted –** This is a process where a device is prepared to record data. In this process, the hard disk writes special information onto its own recording surfaces into areas (blocks) that are ready to accept user data. Since this operation causes all current user data stored on the hard disk to be lost, this is an infrequent operation that usually only happens at the factory that created the hard disk. It is unusual for something to happen to a hard disk that requires the end-user to initially perform this operation.

**GB (GigaByte) –** This value is normally associated with data storage capacity. Basically, it means a thousand million or a billion bytes. In fact, it equals 1,073,741,824 bytes (or 1,024 x 1,024 x 1,024).

**Hardware –** Physical components of a computer system, including the computer itself and peripherals such as printers, modems, mice, etc.

**Host Bus Adapter (HBA) –** A printed circuit board that installs in a standard microcomputer and an interface between the device controller and the computer. Also called a controller.

**Initialize, -ed, Initialization –** After a hard drive (or other storage device) is formatted and partitioned, some special data needs to be written to it that helps the Mac and Windows create files and save data. The process is called initialization. This process, like formatting, causes all user data on the storage device to be lost.

**Interface –** The protocol data transmitters, data receivers, logic and wiring that link one piece of computer equipment to another, such as a hard drive to an adapter or an adapter to a system bus. Protocol means a set of rules for operating the physical interface, such as: do not read or write before the drive is ready.

**I/O (Input/Output) –** Refers to an operation, program or device whose purpose is to enter data into or to extract data from a computer.

**Isochronous –** Data transfer method that ensures that data flows continuously and at a steady rate. These transfers provide guaranteed transmission opportunities at defined intervals.

**Kb (Kilobit) –** Equivalent to 1,000 bits.

**Kb/s –** Kilobits per second. 480Kb/s is equal to 60KB/s.

**KB/s –** Kilobytes per second. A means of measuring throughput.

**Mb (Megabit) –** Equivalent to 1,000,000 bits.

**Mb/s –** Megabits per second. A means of measuring throughput. 480Mb/s is equal to 60MB/s.

**MB/s –** Megabytes per second. A means of measuring throughput.

**Media –** The material or device used to store information in a storage subsystem, such as a tape cartridge, CD, DVD or disk drive.

**Operating System (OS) –** Software that controls the assignment and use of hardware resources such as memory, processor time, disk space and peripherals. An operating system is the basis on which software (applications) run. Windows, Mac OS and UNIX are among the most common.

**Overwrite –** To write data on top of existing data thus erasing the original data.

**Partition, -ing –** After formatting, the hard drive is not yet ready to store files. It must be divided into sections that will contain special information required for a Mac or PC to operate and other sections that will contain the files. This process of dividing up the hard drive is called

partitioning. A partition is just one section of the hard drive that will contain either special data put there by Silverlining or other files and data.

**Peripheral –** A generic term applied to printers, scanners, mice, keyboards, serial ports, graphics cords, disk drives and other computer subsystems. This type of peripheral often relies on its own control software, known as a peripheral driver.

**Port, hardware –** A connection component (SCSI port, for example) that enables a microprocessor to communicate with a compatible peripheral.

**Port, software –** A memory address that identifies the physical circuit used to transfer information between a microprocessor and a peripheral.

**RAM (Random Access Memory) –** Generally referred to as a computer's "memory." An integrated circuit memory chip that allows information to be stored and retrieved by a microprocessor or controller. The information can be stored or accessed in any order, and all storage locations are equally accessible.

**Seek Time –** The amount of time (in thousandths of a second, or milliseconds) that it takes a hard drive's read/write head to move to a specific location on the disk. Average seek, then, is the average of a large number of random samplings all over the disk. Seek time is CPU independent, meaning that seek time is the same for a disk drive, whether it is attached to a computer or not.

**Software –** In a nutshell, software is a set of instructions for the computer. A set of instructions to perform a particular task is called a program. There are two main types of software: system software (an operating system such as Mac OS or Windows) which controls the operation of the computer and application software (programs such as Word or Excel) which enable users to perform tasks such as word processing, spreadsheet creation, graphics, etc.

**Storage –** In computers, any equipment in which information may be kept. PCs generally use disk units and other external storage media (diskettes, CD-ROMs, magnetic disks, etc.) for permanent storage of information.

**Striping –** Spreading data evenly over multiple disk drives to enhance performance. Data striping can be performed on a bit, byte or block basis for optimum application performance.

**Transfer Rate –** The rate at which the drive sends and receives data from the controller. Transfer rates for reading data from the disk drive may not be the same as the transfer rate for writing data to the disk drive. Transfer rates are CPU dependent, meaning that regardless of how great a transfer rate your drive is capable of, the actual transfer rate can only be as fast as the slowest of your hard drive and computer.

**Volume –** A desktop mountable storage area, may be a partition of a hard drive, a removable disk or a cartridge. Typically measured in Megabytes or Gigabytes.

**Utility –** Software designed to perform maintenance tasks on the system or its components. Examples include backup programs, programs to retrieve files and data on disk, programs for preparing (or formatting) a disk or and resource editors.